Arkansas Heart Hospital 1701 So. Shackleford Rd. Little Rock, AR 72211

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Biomedical Coordinator at Arkansas Heart Hospital. Arkansas Heart Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located in Little Rock, a relatively urban area in Arkansas. The primary hospital building is 3 stories tall, and our wireless telemetry system is installed throughout the building, including 138 patient rooms as high as the 3rd. story of the hospital. Our hospital was built in 1997.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for Emergency room, Day Patient pre and post op and Short Stay patients. As a general matter, our WMTS system allows a single nurse to monitor as many as 7 patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, serious consequences could result. Telemetry is used to ambulate patients who are recovering from open heart surgery and to encourage mobility prior to discharge. It is utilized on almost every patient at some point. Such

interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,

Dennis Callahan

Biomedical Coordinator Arkansas Heart Hospital



Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Facilities Director of Weiser Memorial Hospital ("Hospital"). Weiser Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located in Weiser, a relatively rural area in Idaho. The primary hospital building is one story tall, and our wireless telemetry system is installed throughout the building, including four patient rooms. Our hospital was built in 1949 features wide glass windows in the patient rooms.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for pulse oximetry. As a general matter, our WMTS system allows a single nurse to monitor as many as four patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, could cause devastating effects for critical care patients. Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency



to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,		



## COLUMBUS REGIONAL HOSPITAL

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Director of Facilities and Materials Management of Columbus Regional Hospital ("Hospital"). Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located in Columbus, a relatively Rural area in Indiana. The primary hospital building is eight stories tall, and our wireless telemetry system is installed throughout the building, including 144 patient rooms as high as the seventh story of the hospital. Our hospital was built in 1991 and features wide glass windows in most patient rooms. In addition to its use in the hospital, we utilize wireless medical telemetry in other facilities on our 27 acre campus.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for other means such as fetal monitoring, and cardiac rehabilitation. As a general matter, our WMTS system allows a single nurse to monitor as many as 60 patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients. We are currently using our telemetry system to monitor patients with sleep apnea. Interference from monitoring could impact our ability to

monitor low oxygen levels in these patients that can cause death. Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely.

David J. Lenart

Director Facilities and Materials Management

Columbus Regional Hospital

David / Levent



# MOUNT AUBURN HOSPITAL

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

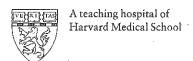
Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Manager of Biomedical Engineering at Mount Auburn Hospital. Mount Auburn Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located in Cambridge, a relatively urban area in Massachusetts. The primary hospital building is 8 stories tall, and our wireless telemetry system is installed throughout the building, including 104 patient rooms as high as the 7th story of the hospital. Our hospital was built in 1972 and features wide glass windows in all patient rooms.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for Fetal Monitoring and Cardiac Rehabilitation. As a general matter, our WMTS system allows a single nurse to monitor as many as 24 patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, this interference would clearly put patients at risk during



the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely

Bob Douglass

Manager of Biomedical Engineering Mount Auburn Hospital 330 Mount Auburn Street Cambridge, MA 02138 rdouglas@mah.harvard.edu



Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Director of Clinical Engineering of Meritus Medical Center. Meritus Medical Center is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Meritus Medical Center is located in Hagerstown, a relatively suburban area in Washington County, Maryland.. The primary hospital building is four stories tall, and our wireless telemetry system is installed throughout the building, including 250 patient rooms as high as the fourth story of the hospital. Our hospital was built in 2010 and features wide glass windows in most patient rooms. In addition to its use in the hospital, we utilize wireless medical telemetry in other facilities on our Robinwood Professional Center campus.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for monitoring sleep apnea patients, cardiac rehab patients, and most any other type of patient. As a general matter, our WMTS system allows a single nurse to monitor as many as four patients. If our WMTS system was impacted

by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, adverse health conditions may go undetected which would have negative impacts on patients such as delayed care or possibly even death. Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,

James E. Eberhart
Director of Bio-Engineering
Meritus Medical Center
11116 Medical Campus Rd.
Hagerstown, MD 21742
301-790-8049
Jim.Eberhart@MeritusHealth.com



Our Pledge: Responsiveness to need. Excellence in caring. Respect for all.



4/26/2015

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Biomedical Department Manager at Beaumont Health located at 468 Cadieux in Grosse Pointe Michigan. We are a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. We are located in Grosse Pointe, Michigan, a relatively suburban area in Michigan. The primary hospital building is 4 stories tall, and our wireless telemetry system is installed throughout the building, including all 250 patient rooms and diagnostic areas as high as the 4<sup>th</sup> story of the hospital. Our hospital was built in the 1970s and most of the Telemetry covered patient areas feature wide glass windows. In addition to its use in the hospital, we utilize wireless medical telemetry in other Medical Office Cardiac Rehab settings that that are part of our hospital

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used in our Emergency Center, our Long Term Acute Care patients, and in our Family Birth Center for both maternal and fetal monitoring. As a general matter, our WMTS system allows a single nurse to monitor as many as 10 patients at a time. We currently monitor over 100 patients with our Telemetry. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, that could result in undetected patient conditions that could lead to irreversible harm to patients up to and including death. Such interference has occurred prior to the WMTS being established and we know from experience that this clearly puts patients at risk during the immediate interference incident. RF Interference is devastating to our reliance on it, and then continues to impact patient care (and the cost of health care) until we are assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,

John S. Crissman

John S Crissman

Manager, Biomedical Engineering Department, Certified Biomedical Engineering Technician Beaumont Health 468 Cadieux



# **Ely-Bloomenson Community Hospital**

328 West Conan Street • Ely, MN 55731-1198
Phone: (218) 365-3271 • Fax: (218) 365-8777 • www.ebch.org

April 22, 2015

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Plant Maintenance Manager of the Ely-Bloomenson Community Hospital ("Hospital"). Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located Ely, a relatively rural area in Minnesota. The primary hospital building is two stories tall, and our wireless telemetry system is installed throughout the building, including 13 patient rooms as high as the 2nd story of the hospital. Our hospital was built in 1957 and features wide glass windows in most patient rooms. In addition to its use in the hospital, we utilize wireless medical telemetry in other facilities on our campus.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for cardiac rehabilitation. As a general matter, our WMTS system allows a single nurse to monitor as many as 5 patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, the lives of our patients would be in immediate jeopardy. Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,

Albert Forsman,

Plant Maintenance Manager



509 West 18th Street P.O. Box 470 Hermann, MO 65041 (573) 486-2191 Fax (573) 486-3743 Directors: Randy Eikermann, President Janet LaBoube, Vice-President

Karin Wolking, RN, BSN, Treasurer

Gordon Gerber

Administrator: Dan McKinney, CPA, MBA

April 27, 2015

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Administrator for the Hermann Area District Hospital. We are a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. We are located in Hermann, MO, a relatively rural area in Missouri. Our hospital has two levels, and our wireless telemetry system is installed throughout the building, including twelve patient rooms. While our hospital was originally built in 1967 with our most recent renovation being completed in 2008, which has wide glass windows in all the patient rooms.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for emergency room patients. As a general matter, our WMTS system allows a single nurse to monitor as many as ten patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients. Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,

Dan McKinney Administrator



Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Director, Building Services at St. Anthony's Medical Center ("Hospital"). Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. The Hospital is located St. Louis, a relatively suburban area in Missouri. The primary hospital building is eight stories tall, and our wireless telemetry system is installed throughout the building, including 465 patient rooms as high as the eighth story of the hospital. Our hospital was built in 1975 with major additions in 1991 and 2008, and features wide glass windows in most patient rooms.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for other purposes including fetal monitoring, cardiac rehabilitation, trauma patients in the Emergency Department, cardiac observation patients and patient fall monitoring for all high risk patients, all in patient rooms as high as the eighth story of the hospital.

As a general matter, our WMTS system allows a single nurse to monitor as many as thirty patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, patients would need to be closely monitored at a higher staffing ratio of one nurse for every two patients. Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will restrict against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,

Brad Taylor, MBA, CHFM Director Building Services

St. Anthony's Medical Center



Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Clinical Engineering Manager of Mercy Medical Center ("Hospital"). Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located in Canton, a relatively urban area in Ohio. The primary hospital building is 12 stories tall, and our wireless telemetry system is installed throughout the building, including 159 patient rooms as high as the 10th story of the hospital. Our hospital was built in 1969 and all [features wide glass windows in most patient rooms]. In addition to its use in the hospital, we utilize wireless medical telemetry in other facilities on our North Canton Statcare campus.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for Cardiac Rehab, Respiratory, Neurology and general observation. As a general matter, our WMTS system allows a single nurse to monitor as many as 32 patients from a central monitoring station. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, this action

should it happen would be catastrophic for patient safety first and foremost, but also financially for our institution to convert all 159 rooms to hardwire monitors (Non-telemetry). Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,

Dennis E. Lyden CBET Manager/Clinical Engineering Dept. Mercy Medical Center, Canton Ohio 44708 330-489-1398



Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Director of Environmental Health & Safety of Thomas Jefferson University Hospitals Methodist ("Hospital"). Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located in Philadelphia, an urban area in Pennsylvania. The primary hospital building is six stories tall, and our wireless telemetry system is installed throughout the building, including 24 patient rooms as high as the sixth story of the hospital. Our hospital was built between 1892 and 1968 and features wide glass windows in most patient rooms.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used throughout the Emergency Department and Operating Rooms. As a general matter, our WMTS system allows a single nurse to monitor as many as 40 patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients. Such interference would clearly put patients at risk during

the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,

Charles Payne RN BSN
Director Environmental Health & Safety
TJUH Methodist Hospital
2301 S. Broad St
Phila PA 19148
Work-215-952-9935
Cell-215-380-6809
chuck.payne@jefferson.edu

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April 24, 2015

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

Ladies and Gentlemen:

I am the Administrator of the Manatí Medical Center ("Hospital"). The Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located in Manatí a relatively urban area in Puerto Rico. The primary hospital building is six (6) stories tall, and our wireless telemetry system is installed throughout the building, including Medicine and Neurosciences Departments patient rooms as high as the four (4) story of the hospital. Our hospital was built in 1984 and features wide glass windows in most patient rooms.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for other cardiac rehabilitation, patients with surgeries, trauma patients, vital signs monitoring, and different treatments monitoring. As a general matter, our WMTS system allows a single nurse to monitor as many as twenty two (22) patients. If our WMTS system was impacted by radio interference from an external source such

# Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268 Page 2 April 24, 2015

as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients. Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against any interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerel

José S. Rosado Santos, MHSA, FACHE

dministrator

## Baptist Memorial Hospital-Memphis 6019 Walnut Grove Road Memphis, TN 38120

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Lead Biomed Tech at Baptist Memorial Hospital-Memphis. This Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located in Memphis a relatively Suburban area in Tennessee. The primary hospital building is 5 stories tall, and our wireless telemetry system is installed throughout the building, including 350 patient rooms as high as the 5th story of the hospital. Our hospital was built in 1973 and features wide glass windows in most patient rooms.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for cardiac rehabilitation. As a general matter, our WMTS system allows a single nurse to monitor as many as 6 patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,	
Sid Long, Lead/BMET	



Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12<sup>th</sup>. Street, S.W. Washington D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am Site Manager of Johnson County Community Hospital. Hospital is a member of the American Hospital Association. I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission is currently considering rules that would allow unlicensed devices (so called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located in Mountain City, a relatively rural area in Tennessee. The primary hospital building is one story tall, and our wireless telemetry system is installed throughout the building,

including six patient rooms and physical therapy department. Our hospital was built in 1997 and features wide glass windows in some patient rooms and all of physical therapy department.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for other purposes such as cardiac rehabilitation. As a general matter, our WMTS system allows a single nurse to monitor as many as 10 patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of the patients would have a severe impact on patient care and safety. Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,		





April 24, 2015

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the ("Hospital"). Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located in Reston a relatively rural area in Virginia. The primary hospital building is 6 stories tall, and our wireless telemetry system is installed throughout the building, including most patient rooms as high as the 5th story of the hospital. Our hospital was built in 1986 and features wide glass windows in most patient rooms. In addition to its use in the hospital, we utilize wireless medical telemetry in other facilities on our 14 acre campus.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for fetal monitors, Neonatal monitors, trauma patients, and in the intensive care units. As a general matter, our WMTS system allows a single nurse to monitor as many as 4 patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, interference would cause a loss of vital signs and any alarms needed to provide patient care. Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely,

Jane Raymond

Chief Operating Officer

Tom Jayners?



# April 21,2015

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Director of Plant Services for HSHS St. Joseph's Hospital in Chippewa Falls, Wisconsin. HSHS St. Joseph's Hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. HSHS St. Joseph's Hospital is located in Chippewa Falls, a relatively suburban area in northwestern Wisconsin. The primary hospital building is five (5) stories tall, and our wireless telemetry system is installed throughout the building, including over 50 patient rooms as high as the 4th story of the hospital. Our hospital was built in 1975 and features wide glass windows in most patient rooms. In addition to its use in the hospital, we utilize wireless medical telemetry in other facilities on our 46 acre campus.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for other services such as fetal monitoring, cardiac rehabilitation, and in the emergency department. As a general matter, our WMTS system allows a single nurse to monitor as many as seven (7) patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, the costs of additional staff to monitor patients and the costs of alternative technologies in place of wireless telemetry would severely impact our overall financial performance and put us at a disadvantage in our market. Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Thank you,

### Roger W. Elliott

Director of Plant Services HSHS St. Joseph's Hospital 2661 County Hwy I Chippewa Falls, WI 54729 715.717.7331 roger.elliott@hshs.org

"To reveal and embody Christ's healing love for all people through our high quality Franciscan health care ministry."

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

#### Ladies and Gentlemen:

I am the Director of Facilities Management at Sacred Heart Hospital. The hospital is a member of the American Hospital Association ("AHA"). I have been informed by the AHA and its engineering arm, the American Society for Healthcare Engineering ("ASHE"), that the Federal Communications Commission ("Commission") is currently considering rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry ("WMTS") system. I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to voice our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices.

ASHE advises that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. Hospital is located in Eau Claire a relatively suburban area in Wisconsin. The primary hospital building is 9 stories tall, and our wireless telemetry system is installed throughout the building, including 210 patient rooms as high as the 9th story of the hospital. Our hospital was built in 1964 and features wide glass windows in most patient rooms.

Our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for walking CV patients & other critical care patients, monitoring Cardiac Rehab. As a general matter, our WMTS system allows a single nurse to monitor as many as 48 patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, and thus could not be relied upon to provide immediate and reliable monitoring of these patients, we would be putting patients' lives at risk if their wave forms are not transmitted and received a patient can code and no one would have seen it and called the code to save their lives. Such interference would clearly put patients at risk during the immediate interference incident, but would continue to impact patient

care (and the cost of health care) until we could be assured that the system would operate free of such interference.

It is for this reason that we seek the Commission's assurance that the rules adopted will assure against <u>any</u> interference to WMTS licensees. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

I have also been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter into the ASHE database a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I do hope the Commission will consider the enormous burden that this type of requirement would impose on our hospital. Our personnel are dedicated to providing high quality health care, and not to the type of database implementation that would appear to be needed, and regularly updated as we expand facilities or the environment around the hospital changes. I, therefore, hope that such proposals will be rejected.

I am told that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask that the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

Sincerely

211100101),		



April 23, 2015

Honorable Tom Wheeler, Chairman Honorable Mignon Clyburn, Commissioner Honorable Jessica Rosenworcel, Commissioner Honorable Ajit Pai, Commissioner Honorable Michael O'Rielly, Commissioner

c/o Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Ex Parte Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268

To Whom It May Concern:

The purpose of this letter is to provide ex parte comments regarding ET Docket No. 14-165 and GN Docket Nos. 12-268 on the potential impact of modifying current rules for communication of important, life-saving medical devices.

My name is Ryan Motl, and I am the clinical engineering manager for Gundersen Health System. As a member of the American Hospital Association, Gundersen Health has been informed of potential Federal Communications Commission (Commission) rules that would allow unlicensed devices (so-called TVWS devices) to operate on the same frequencies as our wireless medical telemetry system (WMTS). I am writing to provide the Commissioners with an understanding of the way we use wireless medical telemetry in our provision of medical services to patients, and to express our concern for the adoption of any rules that would threaten those services with harmful interference caused by newly authorized TVWS devices. This would potentially impact life saving devices that patients rely on for medical care.

It is our understanding that the Commission will be considering the types of environments in which wireless medical telemetry systems are being operated today in determining the requirements that must be imposed on TVWS devices in order to protect WMTS systems from interference. For background, our main campus is located in La Crosse, Wisconsin, a relatively urban community in western Wisconsin. The primary hospital facility is seven stories in height, and our wireless telemetry system is installed throughout the building, including patient rooms as high as the sixth story of the hospital. Our hospital was built in 2013 and features wide glass windows in most patient rooms. In addition to its use at our main campus, we utilize wireless medical telemetry in our smaller regional hospitals. We have invested significant finance and resources in our telemetry system, with an understanding that it resides in a protected bandwidth spectrum. It is critical that life-saving telemetry systems continue in a protected bandwidth.

At Gundersen, our primary use of wireless telemetry is associated with critical care heart patients, although our wireless telemetry system is also used for other inpatient cases. As a general matter, our WMTS system allows a single technician to monitor as many as thirty patients. If our WMTS system was impacted by radio interference from an external source such as a TVWS device, we could not rely upon our WMTS to provide immediate and reliable monitoring of these patients. This can have a direct and detrimental affect on our ability to monitor our patients. This may create a significant patient safety problem. Such interference would clearly put patients at-risk during the immediate interference incident, but would continue to impact patient care (and the cost of health care) until we could be assured that the system would operate free of such interference.

Due to potential and significant negative consequences, we seek the Commission's assurance that the rules adopted will protect WMTS licensee against <u>any</u> interference. It simply will not be enough for the agency to develop rules that will protect the "typical" hospital if those rules do not protect the many, many hospitals that do not fit into a "typical" model.

In addition, we have been advised that some parties commenting in this proceeding have suggested that each hospital utilizing a WMTS system should be required to enter various data into the ASHE database. This would include a detailed description of our campus perimeter, as well as a detailed analysis of the terrain surrounding the hospital campus. I urge the Commission to consider the tremendous burden that this type of mandate would impose on our hospital. Our personnel are dedicated to providing high quality health care, but requiring unnecessary burdens adds to healthcare costs. I ask that such proposals be rejected.

Also, I have learned that the Commission has assured the health care community that it would only allow unlicensed devices to operate in Channel 37 after developing rules that would assure that WMTS licensees would be protected from interference from such devices. I write to ask the Commission give priority consideration to patient safety and reject any proposed rules that would fail to satisfy this appropriate public interest objective.

In sum, we ask the Commission to consider potentially harmful impacts of opening up a protected bandwidth spectrum to unlicensed devices. We ask you to refrain from enacting policy that will negatively impact patient care.

I appreciate the opportunity to provide comments. Please feel free to contact me with any questions.

Sincerely,

Ryan Moth - CBET, BACS